

### **REMARKS**

The non-final Office Action mailed September 2, 2009 has been received and its contents carefully noted. From the Summary page, claims 1-4, 6-8 and 10-37 were pending and indicated as rejected.

By this response, claims 1, 6 and 10 have been amended and claim 37 has been canceled. A typo was corrected. An embodiment for –feed stuff– was added. No statutory new matter has been added. Support for all amendments is found in the original specification.

A Petition for a three-month Extension of Time with the fee accompanies this response.

#### ***Claim Rejections under 35 U.S.C. § 103(a)***

I. Claims 1-2, 4, 6-8, 10-14, 20, 26-27 and 32-37 stand rejected as being unpatentable over Roman (US 6,171,602) in view of Deller et al. (US 5,776,240), Hasenzahl et al. (WO 03/037379) in view of Degussa Press Release titled “Dry Binder – A New Concept for Pressed Powder,”. The rejection as to claim 37 is moot upon claim cancelation. The rejection as to claims 1-2, 4, 6-8, 10-14, 20, 26-27 and 32-362 is respectfully traversed.

Claim 1, as amended, describes a flowing granular adsorbate comprising a pyrogenic silicon dioxide carrier (*e.g.*, starting material) that is prepared by flame hydrolysis, spray drying and a heat treatment. The starting material, preferably Aerosil 300, has the following characteristics: a pore volume of 0.5 to 2.5 ml/g; a pore size distribution that is less than 5% of the total pore volume has a pore diameter of less than 5 nm, remainder meso- and macropores; a pH level of 3.6 to 8.5; a tamped density of 220 to 700 g/l; an average particle diameter of 10 to 120  $\mu\text{m}$ ; and a BET surface area of 40 to 400  $\text{m}^2/\text{g}$ .

A substance such as a foodstuff additive, a chemical intermediate, a feedstuff additive and a plant protection agent is adsorbed onto the granular carrier. The characteristics of the granular adsorbate are described in the “Results” section of the specification.

Applicants submit the beneficial features are not suggested by the art of record. Applicants additionally assert the guidance and motivation needed to select and employ Applicants’ starting material is absent.

The Office Action suggests that Deller's pyrogenically prepared silica granules are suggested as an adsorption media. See col. 1, ll. 28-29. The Office Action also indicates that the granules are Aeroperl. Aeroperl is not specifically mentioned in either Deller or Roman or Hasenzahl.

Aeroperl and Aerosil are different. See, for example, Product Information for Aeroperl 300 Pharma and Aerosil 200 Pharma. Aeroperl is a granulated high purity colloidal silicon dioxide whereas Aerosil is a high purity amorphous anhydrous colloidal silicon dioxide. Their specific surface area (BET) values are different -  $\sim 300$  vs.  $200 \pm 25$ , respectively. Their grain sizes also differ -  $\sim 30$  vs.  $\sim 50$ , respectively. Further evidence suggests that Aeroperl has "twice the water vapour transmission rate of films prepared from formulas" containing Aerosil. See, for example, "Influence of Fumed Silicon Dioxide on the Stabilization of Eudragit RS/RL 30 D film-coated theophylline Pellets".

Because these materials have different characteristics, the produced granular adsorbate also would be expected to be different. As such, a *prima facie* case of obviousness has not been established by the combination of references in order to suggest Applicants' granular adsorbate.

Applicants' granular adsorbate also would not have been suggested by the cited prior art in view of their different methods of preparation. For instance, Hasenzahl uses the term "granular" when referring to its starting material. The term "granular" appears to have a variety of interpretations. For example, U.S. Patent 5,370,878 to Shah et al. defines two types of granulation - wet granulation and dry granulation. (Note also the product by process limitation which correlates with the meaning of granular as evidenced in the specification. This meaning correlates with the results shown in paragraph [1126] in the published application, U.S. 20060229210.) Further, the burden is on the Examiner to establish a similarity between the term "granular" in the prior art and the present invention. The processes appear to differ. Compare the present method with that shown in the primary reference and Deller.

Aeroperl 300 is suggested as being dry granulated. See, for example, "Granulation by roller compaction and enteric coated tablet formulation of the extract of the seeds of *Glinus lotoides* loaded on Aeroperl 300 Pharma". Since the process by which the granules are prepared

affects the characteristics of the granule product, further evidence is necessary suggest how the combination would have suggested Applicants' specific flowing granular adsorbate. Absent evidence, it is not seen that a proper *prima facie* case of obviousness has been established.

Accordingly, it is submitted that amended claim 1 patentably distinguishes over the applied art. In view of the foregoing, Applicants earnestly request withdrawal of the rejection as to amended claim 1 and claims 2, 4, 6-8, 10-14, 20, 26-27 and 32-36, dependent thereon.

**II.** Claims 1, 3, 28 and 30-31 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Minemoto (JP 02049707) in view of Deller et al. (US 5,776,240). The rejection as to claims 1, 3, 28 and 30-31 is respectfully traversed.

Applicants refer to their arguments provided in section I, *supra*, concerning the newly claimed features. Thus, amended claim 1 patentably distinguishes thereover. Accordingly, Applicants courteously solicit withdrawal of the rejection as to amended claim 1 and claims 2-3, 28 and 30-31, dependent thereon.

**III.** Claims 1, 19, 21, 29 and 34 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Park et al. (US 5,654,258) in view of Deller et al. (US 5,776,240). The rejection as to claims 1, 19, 21, 29 and 34 is traversed.

Applicants refer to their arguments provided in section I, *supra*, regarding the newly claimed features. Thus, amended claim 1 patentably distinguishes thereover. In view of the foregoing, Applicants courteously solicit withdrawal of the rejection as to amended claim 1 and claims 19, 21, 29 and 34, dependent thereon.

**IV.** Claims 1, 15-18, and 22-23 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Peterson et al. (US 6,004,584) in view of Deller et al. (US 5,776,240) and the Degussa press release titled "Dry Binder – A New Concept for Pressed Powders" (June 12, 2003). The rejection as to claims 1, 15-18 and 22-23 is respectfully traversed.

Applicants refer to their arguments provided in section I, *supra*, regarding the newly claimed features. Thus, amended claim 1 patentably distinguishes thereover. Accordingly,

Applicants solicit withdrawal of the rejection as to amended claim 1 and claims 15-18, and 22-23, dependent thereon.

V. Claims 1 and 24 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Technical Bulletin Pigments No. 31 (Degussa AG, November 1995) in view of Deller et al. (US 5,776,240). The rejection as to claims 1 and 24 is traversed.

Applicants refer to their arguments provided in section I, *supra*, regarding the newly claimed features. Thus, amended claim 1 patentably distinguishes thereover. As such, Applicants courteously solicit withdrawal of the rejection as to claim 1 and claim 24, dependent thereon.

**CONCLUSION**

All of the stated grounds of rejections have been properly traversed, accommodated, or rendered moot. Therefore it is respectfully requested that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. It is believed that a full and complete response has been made to the outstanding Office Action and, as such, the present application is in condition for all allowance.

It is not believed that extensions of time are required, beyond those that may otherwise be provided for in accompanying documents. However, in the event that additional extensions of time are necessary to prevent abandonment of this application, then such extensions of time are hereby petitioned under 37 C.F.R. 1.136(a), and any fees required therefore are hereby authorized to be charged to Deposit Account No. 02-4300, Attorney Docket No. 032301.440.

Respectfully submitted,

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